



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,713	10/18/2000	Joseph E. Coury	1161	4980

7590 11/27/2002
Forrest L. Collins
Post Office Box 41040
Brecksville, OH 44141-1043

EXAMINER

PATEL, MITAL B

ART UNIT	PAPER NUMBER
----------	--------------

3761

DATE MAILED: 11/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/691,713

Applicant(s)

COURY ET AL.

Examiner

Mital B. Patel

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-21 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-21, 23-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment/Arguments

1. Applicant's arguments filed 9/19/02 have been fully considered but they are not persuasive.
2. In response to Applicant's arguments with respect to claim 1, it should be noted that the term proximate is relative. Furthermore, with respect to the "second conduit has a length" renders the claim vague and indefinite since Applicant has not set forth structure or dimensions which give weight to the term "length".
3. In response to Applicant's arguments with respect to claims 4, 14, and 23, it should be noted that in Col. 9, lines 44-59, Bird teaches an alarm which indicates an unallowable pressure drop/rise which indirectly alerts a subject receiving the effluent gas. Please also see Col. 11, lines 9-18.
4. In response to Applicant's arguments with respect to claims 5, 15, and 25, Bird does teach the use of a visible light in the form of an LED. Please see Col. 9, lines 53-54.
5. In response to Applicant's arguments with respect to claims 6 and 16, Bird does teach an audible alarm to alert gas flow problems. Please see Col., 9, lines 48-50 and also note that pressure is indirectly related to flow and therefore the pressure drop/rise is also indicative of gas flow problems.
6. In response to Applicant's arguments with respect to claims 8, 18, and 29 in regards to the location of the on/off with respect to the other elements, in the

Art Unit: 3761

application as originally filed did not disclose the significance of the on/off switch being substantially flush with or below the anterior surface, i.e., how it solves a stated problem as mentioned in the previous office action. Applicant in the arguments mentions that the feature is to prevent accidental disablement of the alarm system. However, there is no support for that reasoning in the originally filed Application and would constitute new matter if amended into the specification. Therefore, the Examiner maintains that an on/off switch as taught by bird would function equally as well. Finally, Applicant contends that Bird does not teach an on/off or retest switch. Please see Col. 9, lines 58-59 with respect to elements **297** and **298**.

7. In response to Applicant's arguments with respect to the transmitter and receiver and radio signal, the Examiner has cited art which shows that the particular feature of providing a transmitter/receiver/radio signal is known in the art for signaling a second person.

Claim Objections

8. Claims 11, 13 and 23 are objected to because of the following informalities: In the claim, Applicant recites a pressure difference. However, only one sensor is taught and therefore, the term "difference" appears to be a misnomer. Appropriate correction is required.

Art Unit: 3761

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 3, 4, 5, 6, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Bird (US 5165398).

11. As to Claim 1, Bird teaches a personal gas supply delivery system comprising a moisturizing vessel **182** for when in use having the capability to contain a liquid to provide a source of moisture to increase the amount of moisture in a gas passing through the liquid, the moisturizing vessel having a first opening for receiving an influent gas, the moisturizing vessel having a second opening for an effluent gas, a first conduit connected with the second opening, the first conduit for when in use, for receiving the effluent gas, a gas flow alarm **287** connected with the first conduit and a second conduit connected with the gas flow alarm, the second conduit in fluid communication with the first conduit, the gas flow for determining the instantaneous pressure or flow volume of the influent gas and the effluent gas; the second conduit has a length such that the gas flow alarm, when is used by a recipient of the effluent gas, is proximate to the recipient of the effluent gas

Art Unit: 3761

12. As to Claim 3, Bird teaches a system wherein the gas flow alarm is set to alert a subject desiring to receive the effluent gas when the pressure of the influent gas and the effluent gas has met at least one predetermined setting.

13. As to Claim 4, Bird teaches a system wherein the gas flow alarm is set to alert the recipient of the effluent gas by at least one of an audible signal, a visual signal, and a vibratory signal.

14. As to Claim 5, Bird teaches a system wherein the gas flow alarm is set to alert a subject desiring to receive the effluent gas when the pressure of the influent gas and the effluent gas has met at least one predetermined setting and the alerting of the subject is by visible light.

15. As to Claim 6, Bird teaches a system wherein the gas flow alarm is set to alert a subject desiring to receive the effluent gas when the pressure of the influent gas and the effluent gas has met at least one predetermined setting and the alerting of the subject is audible.

16. As to Claim 7, Bird teaches a system further comprising a reset or test feature.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3761

18. Claims 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bird in view of Connell (US 6098617).

19. As to Claims 8 and 18 Bird fails to teach the particulars with respect to the gas flow alarm. However, Applicant has not stated how the particulars solve a stated problem or are advantageous over the prior art. Therefore, the gas flow alarm of Bird would function equally as well without comprising the functionality of the gas flow alarm.

20. As to Claims 9, 10, 19, and 20, the use of a transmitter and receiver and a radio signal as a means for alerting are known in the art.

21. As to Claim 11, Bird teaches a personal gas supply delivery system comprising a moisturizing vessel **182** for when in use having the capability to contain a liquid to provide a source of moisture to increase the amount of moisture in a gas passing through the liquid, the moisturizing vessel having a first opening for receiving an influent gas, the moisturizing vessel having a second opening for an effluent gas, a first conduit connected with the second opening, the first conduit for when in use, for receiving the effluent gas, a gas flow alarm **287** connected with the first conduit and a second conduit connected with the gas flow alarm, the second conduit in fluid communication with the first conduit, the gas flow for determining an instantaneous difference in the pressure or volume of the influent gas per unit of time and the volume of effluent gas per unit of time. Bird fails to specifically teach wherein the second conduit is unitary and connecting with a binary nasal cannula. Instead Bird teaches an endotracheal

Art Unit: 3761

tube. However, Connell does teach that the use of a nasal cannula allows the patient to achieve maximum oxygenation. Therefore, it would be obvious to one of ordinary skill in the art to substitute the endotracheal tube of Bird with the nasal cannula of Connell so that maximum oxygenation can be achieved by the patient.

22. As to Claim 13, Bird teaches a system wherein the gas flow alarm is set to alert a subject desiring to receive the effluent gas when an instantaneous difference in the volume of the influent gas per unit of time and the volume of effluent gas per unit of time has met at least one predetermined setting.

23. As to Claim 14, Bird teaches a system wherein the gas flow alarm is set to alert the recipient of the effluent gas by at least one of an audible signal, a visual signal, and a vibratory signal.

24. As to Claim 15, Bird teaches a system wherein the gas flow alarm is set to alert a subject desiring to receive the effluent gas when the volume of the influent gas and the effluent gas has met at least one predetermined setting and the alerting of the subject is by visible light.

25. As to Claim 16, Bird teaches a system wherein the gas flow alarm is set to alert a subject desiring to receive the effluent gas when the volume of the influent gas and the effluent gas has met at least one predetermined setting and the alerting of the subject is audible.

26. As to Claim 17, Bird teaches a system further comprising a reset or test feature.

Art Unit: 3761

27. Claims 21, 23, 24, 25, 26, 27, 28, and 29 are rejected under 35

U.S.C. 103(a) as being unpatentable over Bird in view of Connell (US 6098617) and further in view of Schreiber et al (US 4381774).

28. As to Claim 21, Bird teaches a personal gas supply delivery system comprising a first conduit, for when in use receiving a supply of a gas at a first pressure from a first gas supply line, the first conduit connected with a gas flow alarm 287, the gas flow alarm for when in use for determining an instantaneous difference in the pressure or volume of the gas per unit of time and the volume of the gas per unit of time, a second conduit connected with the gas flow alarm, for when in use receiving the supply of gas through the gas alarm, the first conduit having a first connector, for when in use providing a detachable airtight seal with a compatible connector on gas supply line, the first connector located distally from the gas flow alarm, and the second conduit having a second connector, for when in use providing a second conduit having a second connector, for when in use providing a detachable airtight seal with a compatible connector on a second gas supply line, the second connector located distally from the gas flow alarm (See Figure 3, Col. 9, lines 31-59). Bird fails to specifically teach a gas distributive device which is a nasal cannula. Instead Bird teaches an endotracheal tube. However, Connell does teach that the use of a nasal cannula allows the patient to achieve maximum oxygenation. Therefore, it would be obvious to one of ordinary skill in the art to substitute the endotracheal tube of Bird with the nasal cannula of Connell so that maximum oxygenation can be achieved by the patient. The above combination also fails to specifically teach a

Art Unit: 3761

battery powered gas flow alarm. However, Schreiber teaches a battery powered gas flow alarm as a safety measure to obviate the problems of operator error in use. Therefore, it would be obvious to one of ordinary skill in the art to modify the gas flow alarm of Bird to that of Schreiber as a safety measure to obviate the problems of operator error in use.

29. As to Claim 23, Bird teaches a system wherein the gas flow alarm is set to alert a subject desiring to receive the gas when an instantaneous difference in the volume of the influent gas per unit of time and the volume of effluent gas per unit of time has met at least one predetermined setting.

30. As to Claim 24, Bird teaches a system wherein the gas flow alarm is set to alert a subject desiring to receive the gas when the pressure of the gas has met at least one predetermined setting.

31. As to Claim 25, Bird teaches a system wherein the gas flow alarm is set to alert the recipient of the effluent gas by at least one of an audible signal, a visual signal, and a vibratory signal.

32. As to Claim 26, Bird teaches a system wherein the gas flow alarm is set to alert a subject desiring to receive the effluent gas when the volume of the gas or the pressure of the gas has met at least one predetermined setting.

33. As to Claim 27, the use of a transmitter and receiver and a radio signal as a means for alerting are known in the art.

34. As to Claim 28, Bird teaches a system further comprising a reset or test feature.

Art Unit: 3761

35. As to Claim 29, Bird fails to teach the particulars with respect to the gas flow alarm. However, Applicant has not stated how the particulars solve a stated problem or are advantageous over the prior art. Therefore, the gas flow alarm of Bird would function equally as well without comprising the functionality of the gas flow alarm.

Conclusion

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6062216, US 5868133, and US 5534851.

37. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**.

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

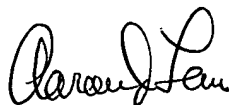
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3761

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mital B. Patel whose telephone number is 703-306-5444. The examiner can normally be reached on Monday-Friday (8:00 - 4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aaron Lewis can be reached on 703-308-0716. The fax phone numbers for the organization where this application or proceeding is assigned are 703-306-4520 for regular communications and 703-306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.



Aaron J. Lewis
Primary Examiner

mbp
November 24, 2002